

ABSTRACT OF THE DISCLOSURE

5 The present invention relates to a method of updating the clock bias
between the common clock of the satellites of a radio navigation satellite
system and the clock of a radio station of an asynchronous cellular
radiotelephone system including a mobile device including a radio
navigation satellite system receiver for receiving satellite data supplied by at
least four satellites and an assistance server for improving the acquisition of
10 satellite data by the mobile device. The method includes the steps of the
mobile device receiving the satellite data, the mobile device calculating
pseudodistances between itself and the satellites, encapsulating the
pseudodistances with the time at which the pseudodistances are
calculated, transmitting the pseudodistances and the time at which the
15 pseudodistances are calculated in the form of a radio signal from the
mobile device to the assistance server via the radio station, and the
assistance server determining the position of the mobile device and
estimating the clock bias between the common clock of the satellites and
the clock of the radio station using the pseudodistances and the time at
20 which the pseudodistances are calculated.